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REMARKS

Claims 1-35 are all the claims pending in the application. Claims 1-35 stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

I. The Prior Art Rejections

Claims 1-3, 5-12, 14-18, 20-25, 27-31 and 33-35 stand rejected under 35 U.S.C. §102(e) as being anticipated by Scholl, et al., hereinafter referred to as "Scholl" (6,145,001), in view of Gupta, et al., hereinafter referred to as "Gupta" (6,457,173). Claims 4, 13, 19, 26, and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Scholl, in view of Gupta, and Rogers, et al., hereinafter referred to as "Rogers" (6,094,655). Applicants respectfully traverse these rejections based on the following discussion.

A. The Rejection Based on Scholl and Gupta.

It is Applicant's position that the applied prior art references do not relate to the claimed invention and are preparing to present arguments in support thereof to the Board of Patent Appeals and Interferences. However, before doing so, in order to avoid appealing the rejection, the following explains the crux of Applicants reasoning of patentability.

The invention comprises a method for processing the same request from a client program to multiple instances of the same server program over the same protocol. Scholl discloses a system that divides (parses) a client's Web request into different portions, sends the different portions of the divided request to dissimilar managed networks using different protocols (not the same request applied to multiple instances of the same server program over the same protocol, as required by Applicant's claims) and then combines

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results obtained from the dissimilar managed networks into a single unified result that appears as a single Web file to the user (Abstract and flowchart in Figure 6 of Scholl). Gupta discloses a method of designing instruction formats for performing parallel processing within a processor, such as an application specific instruction-set processor (column 1, lines 5-50) which is completely unrelated to the claimed processing of the same request from a client program to server programs. No matter how broad of an interpretation is applied to the claim language and to the teachings of the references, there simply is no overlap between the claimed invention and the applied prior art references, as discussed in greater detail below.

In the first sentence of the first substantive paragraph of the rejection (page two of the Office Action) the Office Action states that "Scholl teaches generating a plurality of instances (requests) for each server program" referencing various points in column 7. This is incorrect. In the first few lines, Scholl discloses dividing (parsing) a request into multiple different requests which are referred to as network management requests (NMRs). Each division of the request (each NMR) is analyzed and handled differently as clearly explained in the flowchart shown in Figure 6 discussed in column 7, beginning at line 58. Further, the claim language does not involve any generation of "a plurality of instances (requests) for each server program" as proposed in the Office Action. To the contrary, the claim language provides "a method for processing the same request from a client program to multiple instances of the same server program over the same protocol." The specific claim language in question provides "generating a plurality of instances of said same request" which is fundamentally different than generating a plurality of requests as proposed in the Office Action.

In the next sentence, the Office Action apparently argues a broad interpretation of the claim language and states that an "Instance, similar to object, is a broad term that refers to subclasses of object-oriented code running or instance data used in the instance." It is unclear what this sentence was intended to communicate, how it relates to the claimed invention, or where it came from; however, Applicant submits that the claims clearly require "processing the same request from a client program to multiple instances of the same server program over the same protocol" which is something that Scholl does not do because Scholl divides the request and then processes the divided portions of the

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request using dissimilar managed networks and devices (Abstract, lines 6-9 and 14-17; and flowchart in Figure 6, especially items 22 and 27). There is simply no amount of broadening of the foregoing claim language that would allow the teachings of Scholl to read on the claim language "processing the same request from a client program to multiple instances of the same server program."

The following sentences in the Office Action (last 7 lines on page 2 of the Office Action) admit that Scholl teaches away from the claimed invention by parsing the original request into many different sub-requests, which is directly contrary to the claim language which requires that the "same request" be process to "multiple instances of the same server program." In this section, the Office Action states that the "translated request is a subclass or instance performed by the parser/formatter or a type of an intermediary and vice versa as claimed." This is not what is claimed. The claims do not define parsing of the request into different requests as is done in Scholl. Instead, the claims clearly define "a method for processing the same request from a client program to multiple instances of the same server program over the same protocol" and "generating a plurality of instances of said same request." An interpretation that relates the foregoing claim language to a process of parsing a request into multiple different requests (sub-requests) is incorrect and unreasonable. The last 3 lines on page 2 of the Office Action states that it is well known that a single request usually results in numerous sub requests; however, again this does not relate to the claimed invention because the claimed invention processes the "same request" to "multiple instances of the same server program."

On page 3, beginning on line 2, the Office Action states that Scholl does not explicitly teach "instanting same requests" which is understood to mean that Scholl does not teach "generating a plurality of instances of said same request" as claimed. In order to cure this deficiency, the Office Action refers to Gupta as teaching a multiplexer and as teaching "multiple instances of the same operation." It is unclear how the disclosure of a multiplexer as a functional unit within an integrated circuit processor and how the teaching of performing parallel operations within a processor relates in any way to the claimed "method for processing the same request from a client program to multiple instances of the same server program over the same protocol" much less the claimed

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process of "generating a plurality of instances of said same request" for which Gupta is referenced as teaching.

More specifically, the multiplexer mentioned in column 4, line 9 of Gupta is merely described as one of the functional units that would be found within a processor, such as an integrated circuit processor. There is no indication within Gupta that the multiplexer would be used in any way for "generating a plurality of instances of said same request." Further, the teaching of operation sets and operation groups appearing in column 7, lines 6-31 of Gupta relates to the different logical operations that a processor may perform. See column 7, lines 2-6, where Gupta explains that the operation sets and operation groups being discussed relate to parallel instruction computing architectures that will be utilized in processors. By grouping similar operations together into sets and groups, the process of designing the architecture of a processor is made more efficient. For example, column 7, lines 18-20 of Gupta explain that is more efficient to group arithmetic operations into an operation set. There is nothing within Gupta or any other prior art reference of record which relates such teachings to the claimed "method for processing the same request from a client program to multiple instances of the same server program over the same protocol." Gupta relates to designing the architecture of processors and not to processing requests between clients and servers. Therefore, Applicant submits that no matter how broad an interpretation is applied to the claim language or to the prior art reference, Gupta does not teach or suggest "generating a plurality of instances of said same request" as is proposed in the Office Action.

In item 13 appearing on page 5 of the Office Action, the response arguments argue that Scholl does not require parsing of the request into multiple different requests. This is incorrect. The reader is directed to column 6, lines 25-31 of Scholl which explains that Scholl "parses [divides] and translates the request, converts [makes the divided requests different] the request into the appropriate network management service requests, and forwards each request to the appropriate managed network 6 using the appropriate communication protocol" (bracketed material added). These concepts are repeated at many points within Scholl (see, for example, column 7, lines 2-5; column 7, lines 58-66; Abstract). The parsing of the single request into multiple requests indicates that Scholl clearly divides the request into multiple sub-requests that are different from

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one another because each sub-request includes a different portion of the original request. Further, by using the word "appropriate" before managed network and communication protocol, Scholl indicates that the managed networks and protocols are different. Therefore, Scholl cannot teach or suggest "a method for processing the same request from a client program to multiple instances of the same server program over the same protocol" as in the claimed invention.

With the conventional systems, the client program, the protocol and/or the server programs are modified to allow a request from the client program to be issued to multiple instances of the server program. This process is very time consuming and expensive. The invention is fundamentally different because the invention only modifies the request (and the response to the request) to accommodate the different instances of the server program. By modifying only the request and the response, the invention avoids the need to modify the server program, client program, or protocol. Further, because only the request and the response are modified, the process can be performed automatically using the invention, which makes the request and response transparent (e.g., appear as a one-to-one communication) to the server and client programs.

A single client program often needs to send the same request to several instances of a server program and process the responses obtained from each instance of the program. Each server is assumed to be executing the same program. However, the different instances of the server program have different data and/or states. Conventionally, the client program would have to be customized to accommodate each different instance of the server program. The invention eliminates the need to customize the client program and automates the communication without modification of the programs or the protocol.

As shown in Applicants' Figure 2A, the invention comprises a multiplexor M, with extensions to handle specific protocols. Further, the invention permits context-free operation under certain assumptions, allowing a single multiplexor to handle communications between many pairs of C-S, C'-S', C''-S'' that share the same protocol P, without any additional programming. As shown in Applicants' Figure 2B, the inventive multiplexor 22 can operate with different instances of the client program C, C' and

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different instances of the server program S0, S1, S2, S0', S1', etc., as well as operate with multiple instances of both programs simultaneously.

Applicants note that Scholl discloses a system that parses the client request into multiple different requests where each requested is submitted to a different managed network, while the claimed invention presents a method of processing multiple instances of a server program based on the same request from a single client program. Therefore, it is Applicants' position that Scholl is fundamentally different than the claimed invention and does not describe a similar or equivalent process as in the claimed invention.

The invention generates multiple instances of the same request from the single original request sent by the client program. The servers will send back a response to the client program, either indicating an error condition or successful execution, possibly returning some data. These responses are then modified and combined by the intermediary to correspond to the protocol instance of the client program (e.g., to the same format, version, data structure, etc. of the original request) so that the client program believes it is talking to a single server program in a one-to-one communication environment.

This is fundamentally different than what is being described in Scholl, because Scholl only directs a different portion of any client request to a single server. More specifically, item 25 in Figure 6 illustrates that Scholl merely forwards the portion of the same request to the appropriate network management proxy agent. Scholl does not generate instances of the same request, and instead merely sends the portion of the request to the server that will supply the appropriate answer.

More specifically, in column 7, line 58-column 8, line 14, Scholl explains that the request is parsed and translated with a programmable device, or a circuit device, into at least one network management request ("NMR"). The request is analyzed as to whether processing the request requires interaction with a managed network. If not, the request is processed locally; and if so, the request is forwarded to an appropriate network management proxy agent 25. After the forwarding step 25, the network management proxy agent determines whether the information is in the local database. If yes, the information is obtained therefrom; and if not the request is transmitted to a managed network by access protocols. Then network management information transmissions are

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received in response to each request from a managed network (and may be stored in the local database for future retrieval).

This clearly demonstrates that Scholl does not generate "a plurality of instances of said same request using said intermediary" (independent claims 1, 16, 23, and 30) or modify "said same request to create multiple instances of said same request" and transfer "said instances of said same request to corresponding ones of said instances of said same server program" (independent claim 8) as in the claimed invention.

While Scholl states that the request is analyzed as to whether processing the request requires interaction with one or more managed networks, this does not indicate that multiple instances of the same request are transferred to different instances of the same server program, as in the claimed invention. To the contrary, the system disclosed in Scholl merely determines which single managed network will contain information that responds to the request (or a portion of the request) and then makes that request (or portion of the request) to that given network. There is no disclosure in Scholl that would teach or suggest to one ordinarily skilled in the art to generate "a plurality of instances of said same request" as in the claimed invention. Instead, Scholl merely requests that each managed network retrieve its portion of the information needed to respond to the request.

Therefore, as shown above, Scholl discloses a system that parses the client request into multiple different requests where each requested is submitted to a different managed network, while the claimed invention presents a method of processing multiple instances of the same request from a single client program. Gupta relates to designing the architecture of processors and not to processing requests between clients and servers. Therefore, it is Applicants position that Scholl and Gupta are fundamentally different than the claimed invention. Thus, Applicants submit that the proposed combination of Scholl and Gupta does not teach or suggest "generating a plurality of instances of said same request using said intermediary" (independent claims 1, 16, and 23) or "modifying said same request to create multiple instances of said same request" and "transferring said instances of said same request to corresponding ones of said instances of said same server program" (independent claim 8) as in the claimed invention. In view of the foregoing, Applicants submit that independent claims 1, 8, 16, 23, and 30 are not rendered obvious by Scholl and Gupta and are patentable. Further, dependent claims 2, 3, 5-7, 9-12, 14,

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15, 17, 18, 20-22, 24, 25, 27-31, and 33-35 are similarly patentable, not only by virtue of their dependency from a patentable independent claim, but also by virtue of the additional features of the invention defined. In view the forgoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

B. The Rejection Based on Scholl in view of Rogers

Rogers is referenced for the limited purpose of teaching specific operations that are performed on the response data including listing, adding, subsets, maximums, minimums, and averages. Rogers is not referenced (and does not teach or suggest) the inventive feature of processing multiple instances of the same request to different instances of the same server program as in the claimed invention (as explained above). Therefore, Rogers does not cure the deficiencies of Scholl and Gupta discussed above with respect to independent claims 1, 8, 16, 23, and 30 and such independent claims are patentable over any combination of Scholl and Rogers. Thus, it is Applicants position that independent claims 1, 8, 16, 23, and 30 are patentable over the prior art of record. Further, dependent claims 4, 13, 19, 26, and 32 are similarly patentable, not only because they depend from a patentable independent claim, but also because of the additional features the dependent claims define. In view the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

II. Formal Matters and Conclusion

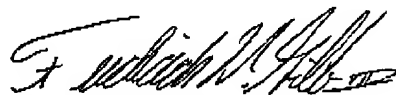
In view of the foregoing, Applicants submit that claims 1-35, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

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Please charge any deficiencies and credit any overpayments to Attorney's Deposit
Account Number 09-0441.

Respectfully submitted,



Frederick W. Gibb, III
Registration No. 37,629

Date: 3-11-05
McGinn & Gibb, PLLC
2568-A Riva Road, Suite 304
Annapolis, Maryland 21401
(301)261-8071
Customer No. 29154